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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N. V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VAN DEN ENDEN, Adrianus, Wilhelmus, Maria** [NL/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). **ARENDS, Marc, Victor** [NL/DE]; c/o Philips Intellectual Property &, Standards GmbH Weissshausstr. 2, 52066 Aachen (DE).

(74) Agent: **MEYER, Michael**; Philips Intellectual Property &, Standards GmbH Weissshausstr. 2, 52066 Aachen (DE).

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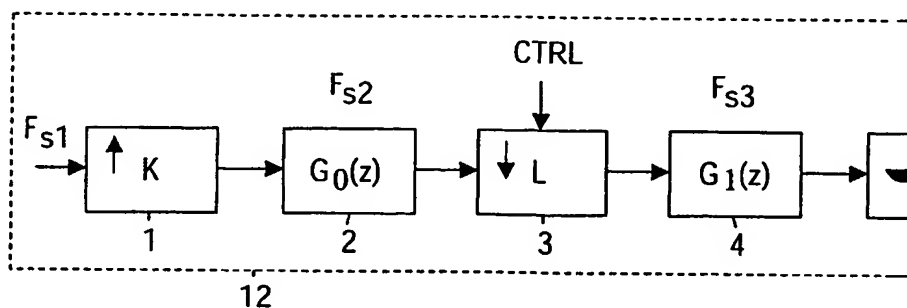
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(54) Title: UP AND DOWN SAMPLE RATE CONVERTER



(57) Abstract: Sample rate converters (12) for converting input sample rates (F_{s1}) of signals into output sample rates (F_{s4}) are provided with sample rate adapters (3,6) for adapting (basic idea) intermediate sample rates (F_{s2}) such that output sample rates (F_{s4}) are larger (upsampling) or smaller (downsampling) than input sample rates (F_{s1}), to reduce their complexity and to avoid bookkeeping and structure switching problems. Sample rate adapters (3, 6) in the form of variable sample rate decrease (3) allow the sample rate converters (12) to be used in video applications requiring DC-out being equal to DC-in. Sample rate adapters (3, 6) in the form of variable sample rate increase (6) allow the sample rate converters (12) to be used in audio applications. By locating the sample rate adapter (3, 6) between a fixed sample rate increaser (1) for increasing with a factor K and a fixed sample rate decrease (5) for decreasing with a factor M, filters (2,4) in between can be designed independently from the varying factor L as long as K and M are fixed and $L \leq K$.

INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03H17/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	US 5 157 395 A (DEL SIGNORE BRUCE ET AL) 20 October 1992 (1992-10-20) column 3, line 22 - column 4, line 26; figure 1	2-5
Y	US 5 485 152 A (SOBOL JAMES M ET AL) 16 January 1996 (1996-01-16) column 2, line 34 - line 54	6-8
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☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

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Information on patent family members

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